



The Innovation Geoscience: An international journal of Earth science

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The Earth is the only home for us in the universe. The exploration and exploitation of the Earth are being driven by human needs. However, the rapid industrialization and unsustainable consumption of Earth's resources during the past two centuries have resulted in severe environmental deterioration and biodiversity loss. The world has already begun to feel the effects of climate change, depletion of natural resources, and ecological disruption as a result of human activities. Are we heading towards self-destruction due to the depletion of natural resources and deterioration of the living environment? Can we achieve a high level of sustainable development through a better understanding of the Earth-human interactions and their consequences?

The human impact on life on Earth has been significant since the 1970s, with the growth of population and perturbation from human activities, leading to a threat to global sustainable development. The intricate interplay between the Earth's many subsystems and their effects on human societies and vice-versa cannot be fully understood within the framework of a single scientific discipline. Earth System Science, an interdisciplinary endeavor that views the Earth as a single complex system driven by external forces and numerous internal feedbacks among its interacting components, is the key to addressing the planetary environmental crises we face today. But how can scientific and technological advances from physics, chemistry, geology, biology, materials science, and computer science be integrated to deeply study the Earth as a complex dynamic system?

Throughout human history, from the Paleolithic to the Renaissance and from foraging to the Industrial Revolution, curiosity has been the engine of innovation, pushing the boundaries of science and technology that have allowed us to explore the depths of the oceans, the bowels of the Earth, and outer space, but there are still many mysteries to unlock. Our understanding of the Earth system is continuously improving as we gain more observations

of Earth and other planets in the solar system. At the same time, the revolution in information technology has ushered in a new era of big data and artificial intelligence in geoscience. Global challenges in the Earth system are being addressed through interdisciplinary, international cooperation and integration. Earth sciences encompass much more than rocks and volcanoes. They study the processes that form and shape the Earth's surface, the natural resources we use, the cycles and links between various ecosystems, and how the Earth and other planets are interconnected.

There is increasing optimism about achieving sustainable development in the long run. Because of this, it is more important than ever to provide a platform for promoting and disseminating studies that advance Earth System Science. In response to this urgent need, we are launching a new journal, **The Innovation Geoscience**, to provide a collaborative, inclusive, and open platform for Earth scientists all over the world. The newly established journal aims to contribute significantly to the advancement of multidisciplinary geoscience research, promote collaboration with other disciplines, and foster the sustainable development of human society. Its primary focus is on the evolution of the Earth, other planets, and the environment, as well as the harmonious coexistence of humans and nature. This journal recognizes the importance of geoscience research in addressing current environmental challenges and seeks to provide a platform for researchers worldwide to share their findings. In summary, **The Innovation Geoscience** aims to become one of the leading journals in the Earth sciences, including geology, oceanography, astronomy, geography, and atmospheric science. Its publication will be a valuable resource for scholars across different fields who are interested in contributing to the sustainability of our planet.

Let us see the unseen and change the unchanged.